From: Hartzler, Robert G [AGRON]

To: Lee Van Wychen; "Bradley, Kevin"; Chism, William; hager@illinois.edu; wgj@purdue.edu; Tindall, Kelly

Cc: "Bryan Young"

Subject: Re: Any Update on Dicamba Resistance in Waterhemp or Other Weeds

**Date:** Friday, August 28, 2020 10:00:06 AM

Oooh, can I be the first to go out on a limb on this? I would guess <10% by unbiased, trained people. Up to 50% (or higher) by biased or untrained folks

Thanks for the comment, I heard some people are saying that I'm all for dicamba now. The article was written with the acknowledgement it's here to stay most likely, so let's make the best of it.

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From: Lee Van Wychen <Lee.VanWychen@wssa.net>

Date: Friday, August 28, 2020 at 8:40 AM

**To:** Kevin Bradley <bradleyke@missouri.edu>, "'Chism, William'" <Chism.Bill@epa.gov>, Bob Hartzler <hartzler@iastate.edu>, "hager@illinois.edu" <hager@illinois.edu>, William Johnson <wgj@purdue.edu>, "'Tindall, Kelly'" <tindall.kelly@epa.gov>

Cc: 'Bryan Young' <BryanYoung@purdue.edu>

Subject: RE: Any Update on Dicamba Resistance in Waterhemp or Other Weeds

Another question for you guys- What is the "error rate" for misidentifying dicamba injury? Let's say you go out to a field with alleged dicamba injury and it actually turns out its 2,4-D or another herbicide?

Thanks, Lee

P.s. Bob- I agree with the points you made in your "open letter" yesterday: https://crops.extension.iastate.edu/blog/bob-hartzler/open-letter-epa

From: Bradley, Kevin [mailto:bradleyke@missouri.edu]

**Sent:** Friday, August 28, 2020 9:34 AM

To: Chism, William; lee.vanwychen@wssa.net; hartzler@iastate.edu; hager@illinois.edu;

wgj@purdue.edu; Tindall, Kelly

Cc: Bryan Young

Subject: Re: Any Update on Dicamba Resistance in Waterhemp or Other Weeds

Bill, the United Soybean Board has funded a project for the past two seasons that involves us screening waterhemp populations from several states. This is just an

initial screen to determine the likelihood of resistance in a given population and so we are only using ½ and 1X rates of dicamba on small, 3-4 inch waterhemp plants. We have had a lot of populations to screen the past two seasons and so we haven't yet been able to take the most suspicious populations and subject them further to a true dose-response to determine resistance. Some preliminary results of our screenings are shown in the attached slides. Although no one I know of has come out with an "official" dicamba-resistant waterhemp population yet, I receive a number of calls each year about not being able to effectively control waterhemp with dicamba already after just 2 or 3 seasons. Obviously there could be many reasons for these failures but based on these calls/visits/etc. coupled with the results we are already seeing from our screening in the attached slides, I'm pretty sure there are already dicamba-resistant waterhemp populations out there, we just haven't confirmed them yet.

## **Kevin Bradley**

From: "Chism, William" < Chism. Bill@epa.gov>

Date: Friday, August 28, 2020 at 8:06 AM

**To:** Lee VanWychen <a href="mailto:lee.vanwychen@wssa.net">lee.vanwychen@wssa.net</a>, Bob Hartzler <a href="mailto:leau">lee.vanwychen@wssa.net</a>, Bob H

Subject: Any Update on Dicamba Resistance in Waterhemp or Other Weeds

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## Hello Gentlemen

The Office of Pesticide Programs is working on the registration of over-the-top dicamba for cotton and soybeans. We have found some new reports of dicamba resistance in Palmer amaranth but very little discussion of waterhemp. In 2019 there was a short description of dicamba-resistant waterhemp in the Progressive Farmer (below). Is there anything you can share about dicamba-resistant waterhemp? Are there any other weed species that you are aware of where dicamba is showing signs of potential resistance?

Thank you. Bill Chism

https://www.dtnpf.com/agriculture/web/ag/crops/article/2019/08/30/possible-dicambaresistance-cropping

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